

Summary of April 20, 2004 Perchlorate Regulations Hearing Comments

There were 23 written and oral comments to the April 20th hearing on 310 CMR 22.06D. Sixteen of the commenters (or approximately 70%) specifically mentioned that they supported the Massachusetts Water Works Association (MWWA) comments, which are listed below with a response to each comment.

1) Support for occurrence monitoring

- There appears to be consensus on support for collecting occurrence data to evaluate existence of perchlorate statewide.

Recommendation and suggested action: Continue monitoring during 2004 with the exception of delayed surface water sampling as described below.

2) Lack of public involvement in developing emergency regulations.

- Concern that these regulations are driven more by a schedule than a public health risk.
- Water suppliers and agencies concerned they were not consulted prior to initial development of regulations.
- Emergency regulations circumvented mandatory public hearing process before monitoring began.

Response and suggested action: To address the concerns about the monitoring lead time and the lack of a public hearing, it is important to note that the Department decided it was necessary to set a Maximum Contaminant Level (MCL) by January 2005 due to the health concern risks of perchlorate. EPA is presently considering setting an MCL for perchlorate but the EPA process will likely take several years. Due to the delay in federal action, which includes having the National Academy of Sciences (NAS) review and report on EPA's last draft health assessment, DEP decided to move forward immediately toward setting an MCL. Given the nature of the risk posed to public health and the known presence of perchlorate in parts of Massachusetts, DEP needed to require testing immediately to gather occurrence data.

The Safe Drinking Water Act Advisory Committee met on March 9, 2004, at which time DEP provided information to the committee and received feedback on the proposed emergency regulation. Water suppliers are represented on this committee.

DEP had input from the Office of Research and Standards' Advisory Board to set a health advisory of 1 ppb.

To collect this data and to be able to set an MCL by 2005, monitoring needed to begin immediately to ensure sampling occurred during the cold weather months. In order to have sampling in the beginning of 2004, an emergency regulation was needed and was done knowing that a public hearing would still be held within 90 days.

3) Request to suspend regulations while awaiting the NAS review

- There were several comments seeking to suspend the regulation until the NAS report is released (anticipated this fall) while setting a trigger for issuing a

health advisory at 6 ppb (the California Public Health Goal) until the NAS report is available.

Response and suggested action: DEP plans to review and comment on the NAS study when it is available. If the NAS report is available on schedule DEP will consider its findings in our MCL decision. But as of this time, due to the extensive review of the 1 ppb by the Department, we are confident in the use of this level as a health advisory level.

4) Detection/reporting levels

- Concerns about the required minimum reporting level (MRL) of 1.0 ug/L (ppb)
- Levels reported less than 1 ppb will be subject to question due to “J” values and specific conductivity interference.
- Ability of testing laboratories to report at 1 ppb needs to be more thoroughly evaluated.
- Suspend the regulations or at least the next round of monitoring until the approved laboratories complete performance testing.

Response and suggested action: The laboratories had analyzed thousands of samples using EPA method 314 under the Unregulated Contaminant Monitoring Rule (UCMR). To analyze low-level perchlorate as required by DEP, laboratories purchased new instrumentation or made modifications to existing instrumentation in order to be able to better differentiate between positive results and noise.

At or above the MRL, a laboratory can reliably detect and measure the concentration of the contaminant in the water sample (i.e., the laboratory can report the contaminant concentration with confidence). However, between the MRL and the MDL, there can be error in measuring the concentration of the contaminant. Moreover, as the analysis approaches the MDL, the false positive rate (false detections) can increase. In order to control this potential problem, perchlorate concentrations measured between the MDL and the MRL (1.0 ug/L) must be reported as estimated (J) values (i.e., perchlorate is positively present, but tentatively quantified). A numerical value is given so that the water suppliers will have some warning of perchlorate levels that are approaching the MRL.

If a level is reported greater than 1 ppb, the Department is requiring both reanalysis of the initial sample and, if the result is confirmed, immediate resampling of the affected source splitting this second sample between two approved laboratories. Performance testing by these laboratories will also be required to further support the DEP laboratory approval process. These laboratories must participate in a perchlorate proficiency test (PT) to ensure lab performance. The first round of the PT evaluation is to be completed by the end of May 2004; therefore, if possible, samples should be collected for surface water sources during June for the second quarter monitoring to ensure that the selected laboratory has successfully completed the first round of the PT.

If a laboratory fails the first PT round, the Department will immediately withdraw its perchlorate approval until it successfully analyzes two consecutive PT rounds.

A letter has been sent to surface water systems requesting that they delay their second quarter perchlorate monitoring until June 2004, when all approved laboratories will have completed the first round of proficiency testing (PT).

5) Confirmatory Sampling

- Concern that the regulation did not contain provisions requiring confirmatory sampling

Response and suggested action: The provisions of the drinking water regulations governing confirmation sampling apply to the perchlorate rule. The Department is requiring confirmatory sampling of those water supplies exceeding the MRL of 1 ppb. The confirmation sample will be split between the original laboratory and a second laboratory approved by the Department for low level perchlorate analysis. Due to concerns over the acute health effects of perchlorate, the resampling and analysis will take place in a short time frame. If perchlorate is detected in the confirmation sample the Department will review all the quality assurance/quality control data associated with the analysis of both samples.

6) Public Notification

- No specific public notification language mentioned in the regulation
- Standard language was not added to the Public Notification regulation (310 CMR 22.16)
- Concern that “J” values will have to be reported in the Consumer Confidence Report (CCR).
- Request that public notification be held until the labs complete one round of performance testing.

Response and suggested action: Qualified results (“J”), due to their estimated value, will not have to be reported in the CCR.

DEP will provide a public notification template to all affected systems. Public notification will only be required if the contamination level is greater than 1 ppb and it is determined that the source was and will continue to remain on-line.

7) Strategy for detects

- Need for guidance document for when an exceedance of the health advisory occurs.
- Concern by commenters that this guidance document was not available before monitoring began.
- Request that regulations be suspended until guidance for detection is finalized.

Response and suggested action: An existing draft guidance document for detection will be finalized before the June monitoring for surface water suppliers.

8) Small System Issues

- Concerns about fiscal affect on very small systems
- Suggestion for flexibility for enforcement action for these systems.

Response and suggested action: Due to the acute nature of the perchlorate health effects it was not considered prudent to exclude small systems from this monitoring.

9) Other Issues/Comments:

- All laboratories with Ion Chromatography should be considered for approval, not just labs approved under the Unregulated Contaminant Monitoring Rule (UCMR).
- DEP and MA DPH conduct an assessment of occurrence of perchlorate in bottled water

Response and suggested action: In the absence of explicit state or federal procedures, DEP's process in collecting this occurrence data has been to follow the EPA UCMR process as closely as possible.

DEP will consult with MA DPH regarding the possibility of testing for perchlorate in bottled water.